



Local invariants of smooth foliations

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Abstract. We study local geometry of foliations generated by smooth submersions. The canonical form of the structure equations of a smooth submersion has been obtained. As an example we consider the foliation of two-dimensional surfaces in three-dimensional Euclidean space and describe the invariants of the foliation.

Keywords: smooth foliation, differential invariant, algebra of invariants, structure equations, frame bundle, Elie Cartan's method

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